

3 - SSB ban - MEPS

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MEPS 2015

Based on: https://meps.ahrq.gov/mepstrends/hc_cond/

```
temp <- tempfile()
download.file("https://meps.ahrq.gov/mepsweb/data_files/pufs/h181ssp.zip",temp)
FYC <- read.xport(unzip(temp))
unlink(temp)
year <- 2015

if(year <= 2001) FYC <- FYC %>% mutate(VARPSU = VARPSU15, VARSTR=VARSTR15)
if(year <= 1998) FYC <- FYC %>% rename(PERWT15F = WTDPER15)
if(year == 1996) FYC <- FYC %>% mutate(AGE42X = AGE2X, AGE31X = AGE1X)

FYC <- FYC %>%
  mutate_at(vars(starts_with("AGE")),funs(replace(., .< 0, NA))) %>%
  mutate(AGELAST = coalesce(AGE15X, AGE42X, AGE31X))
```

```
## Warning: funs() is soft deprecated as of dplyr 0.8.0
## please use list() instead
##
## # Before:
## funs(name = f(.))
##
## # After:
## list(name = ~f(.))
## This warning is displayed once per session.
```

```
FYC$ind = 1

# Employment Status
if(year == 1996)
  FYC <- FYC %>% mutate(EMPST53 = EMPST96, EMPST42 = EMPST2, EMPST31 = EMPST1)

FYC <- FYC %>%
  mutate_at(vars(EMPST53, EMPST42, EMPST31), funs(replace(., .< 0, NA))) %>%
  mutate(employ_last = coalesce(EMPST53, EMPST42, EMPST31))

FYC <- FYC %>% mutate(
  employed = 1*(employ_last==1) + 2*(employ_last > 1),
  employed = replace(employed, is.na(employed) & AGELAST < 16, 9),
  employed = recode_factor(employed, .default = "Missing", .missing = "Missing",
    "1" = "Employed",
    "2" = "Not employed",
    "9" = "Inapplicable (age < 16)"))
```

```
# Keep only needed variables from FYC
FYCsub <- FYC %>% select(employed,ind, DUPERSID, PERWT15F, VARSTR, VARPSU)
```

Load event files

```
temp <- tempfile()
download.file("https://meps.ahrq.gov/mepsweb/data_files/pufs/h178assp.zip",temp)
RX <- read.xport(unzip(temp))
unlink(temp)
temp <- tempfile()
download.file("https://meps.ahrq.gov/mepsweb/data_files/pufs/h178bssp.zip",temp)
DVT <- read.xport(unzip(temp))
unlink(temp)
temp <- tempfile()
download.file("https://meps.ahrq.gov/mepsweb/data_files/pufs/h178dssp.zip",temp)
IPT <- read.xport(unzip(temp))
unlink(temp)
temp <- tempfile()
download.file("https://meps.ahrq.gov/mepsweb/data_files/pufs/h178dssp.zip",temp)
IPT <- read.xport(unzip(temp))
unlink(temp)
temp <- tempfile()
download.file("https://meps.ahrq.gov/mepsweb/data_files/pufs/h178essp.zip",temp)
ERT <- read.xport(unzip(temp))
unlink(temp)
temp <- tempfile()
download.file("https://meps.ahrq.gov/mepsweb/data_files/pufs/h178fssp.zip",temp)
OPT <- read.xport(unzip(temp))
unlink(temp)
unlink(temp)
temp <- tempfile()
download.file("https://meps.ahrq.gov/mepsweb/data_files/pufs/h178gssp.zip",temp)
OBV <- read.xport(unzip(temp))
unlink(temp)
temp <- tempfile()
download.file("https://meps.ahrq.gov/mepsweb/data_files/pufs/h178hssp.zip",temp)
HHT <- read.xport(unzip(temp))
unlink(temp)
```

Define sub-levels for office-based and outpatient

To compute estimates for these sub-events, replace ‘event’ with ‘event_v2X’ in the ‘svyby’ statement below, when applicable

```
OBV <- OBV %>%
  mutate(event_v2X = recode_factor(
    SEEDOC, .default = 'Missing', .missing = "Missing", '1' = 'OBD', '2' = 'OBO'))

OPT <- OPT %>%
```

```
mutate(event_v2X = recode_factor(
  SEEDOC, .default = 'Missing', .missing = "Missing", '1' = 'OPY', '2' = 'OPZ'))
```

Sum RX purchases for each event

```
RX <- RX %>%
  rename(EVNTIDX = LINKIDX) %>%
  group_by(DUPERSID, EVNTIDX) %>%
  summarise_at(vars(RXSF15X:RXXP15X), sum) %>%
  ungroup
```

Stack events (dental visits and other medical not collected for events)

```
stacked_events <- stack_events(RX, IPT, ERT, OPT, OBV, HHT, keep.vars = c('SEEDOC', 'event_v2X'))

## Removing event keys...

## evnt_key is missing. Using 'RX'.

## evnt_key is missing. Using 'IP'.

## evnt_key is missing. Using 'ER'.

## evnt_key is missing. Using 'OP'.

## evnt_key is missing. Using 'OB'.

## evnt_key is missing. Using 'HH'.

## Adding total SOPs...

## Warning: Unknown columns: `LINKIDX`, `SEEDOC`, `event_v2X`

## Warning: Unknown columns: `LINKIDX`, `SEEDOC`, `event_v2X`

## Warning: Unknown columns: `LINKIDX`, `SEEDOC`, `event_v2X`

## Warning: Unknown columns: `LINKIDX`

## Warning: Unknown columns: `LINKIDX`

## Warning: Unknown columns: `LINKIDX`, `SEEDOC`, `event_v2X`
```

```
stacked_events <- stacked_events %>%
  mutate(event = data,
         PR15X = PV15X + TR15X,
         OZ15X = OF15X + SL15X + OT15X + OR15X + OU15X + WC15X + VA15X)
```

Read in event-condition linking file

```
temp <- tempfile()
download.file("https://meps.ahrq.gov/mepsweb/data_files/pufs/h178if1ssp.zip",temp)
clink1 <- read.xport(unzip(temp))
unlink(temp)
clink1 = clink1 %>%
  select(DUPERSID,CONDIDX,EVNTIDX)
```

Read in conditions file and merge with condition_codes, link file

```
temp <- tempfile()
download.file("https://meps.ahrq.gov/mepsweb/data_files/pufs/h180ssp.zip",temp)
cond <- read.xport(unzip(temp))
unlink(temp)

cond <- cond %>%
  select(DUPERSID, CONDIDX, CCCODEX) %>%
  mutate(CCS_Codes = as.numeric(as.character(CCCODEX))) %>%
  left_join(condition_codes, by = "CCS_Codes") %>%
  full_join(clink1, by = c("DUPERSID", "CONDIDX")) %>%
  distinct(DUPERSID, EVNTIDX, Condition, .keep_all=T)
```

```
## Warning: Column `DUPERSID` joining factors with different levels, coercing
## to character vector
```

```
## Warning: Column `CONDIDX` joining factors with different levels, coercing
## to character vector
```

Merge events with conditions-link file and FYCsub

```
all_events <- full_join(stacked_events, cond, by=c("DUPERSID","EVNTIDX")) %>%
  filter(!is.na(Condition),XP15X >= 0) %>%
  mutate(count = 1) %>%
  full_join(FYCsub, by = "DUPERSID")
```

```
## Warning: Column `EVNTIDX` joining character vector and factor, coercing
## into character vector
```

```
## Warning: Column `DUPERSID` joining character vector and factor, coercing
## into character vector
```

Sum by person, condition, across event

```
all_pers <- all_events %>%
  group_by(employed, ind, DUPERSID, VARSTR, VARPSU, PERWT15F, Condition, count) %>%
  summarize_at(vars(SF15X, PR15X, MR15X, MD15X, OZ15X, XP15X), sum) %>% ungroup

## Warning: Factor `Condition` contains implicit NA, consider using
## `forcats::fct_explicit_na`

PERSdsgn <- svydesign(
  id = ~VARPSU,
  strata = ~VARSTR,
  weights = ~PERWT15F,
  data = all_pers,
  nest = TRUE)

results <- svyby(~XP15X, by = ~Condition + employed, FUN = svymean, design = PERSdsgn)
print(results)

##
## Acute Bronchitis and URI.Employed
## Allergic reactions.Employed
## Anemia and other deficiencies.Employed
## Appendicitis.Employed
## Back problems.Employed
## Cancer.Employed
## Cataract.Employed
## Cerebrovascular disease.Employed
## Complications of pregnancy and birth.Employed
## Complications of surgery or device.Employed
## Congenital anomalies.Employed
## COPD, asthma.Employed
## Diabetes mellitus.Employed
## Disorders of mouth and esophagus.Employed
## Disorders of teeth and jaws.Employed
## Disorders of the upper GI.Employed
## Epilepsy and convulsions.Employed
## Female genital disorders, and contraception.Employed
## Gallbladder, pancreatic, and liver disease.Employed
## Glaucoma.Employed
## Headache.Employed
## Heart disease.Employed
## Hemorrhagic, coagulation, and disorders of White Blood cells.Employed
## Hereditary, degenerative and other nervous system disorders.Employed
## Hernias.Employed
## Hyperlipidemia.Employed
## Hypertension.Employed
## Infectious diseases.Employed
## Influenza.Employed
## Intestinal infection.Employed
## Kidney Disease.Employed
```

Hemorrhagic, co
Hereditary, de

## Male genital disorders.	Employed	
## Mental disorders.	Employed	
## Non-malignant breast disease.	Employed	
## Non-malignant neoplasm.	Employed	
## Normal birth/live born.	Employed	
## Osteoarthritis and other non-traumatic joint disorders.	Employed	Osteoarthritis
## Other bone and musculoskeletal disease.	Employed	
## Other care and screening.	Employed	
## Other circulatory conditions arteries, veins, and lymphatics.	Employed	Other circulatory
## Other CNS disorders.	Employed	
## Other endocrine, nutritional & immune disorder.	Employed	Other
## Other eye disorders.	Employed	
## Other GI.	Employed	
## Other stomach and intestinal disorders.	Employed	
## Other urinary.	Employed	
## Otitis media.	Employed	
## Paralysis.	Employed	
## Perinatal Conditions.	Employed	
## Pneumonia.	Employed	
## Poisoning by medical and non-medical substances.	Employed	Poisoning
## Residual Codes.	Employed	
## Skin disorders.	Employed	
## Symptoms.	Employed	
## Systemic lupus and connective tissues disorders.	Employed	Systemic
## Thyroid disease.	Employed	
## Tonsillitis.	Employed	
## Trauma-related disorders.	Employed	
## Urinary tract infections.	Employed	
## Acute Bronchitis and URI.	Not employed	
## Allergic reactions.	Not employed	
## Anemia and other deficiencies.	Not employed	
## Appendicitis.	Not employed	
## Back problems.	Not employed	
## Cancer.	Not employed	
## Cataract.	Not employed	
## Cerebrovascular disease.	Not employed	
## Complications of pregnancy and birth.	Not employed	
## Complications of surgery or device.	Not employed	
## Congenital anomalies.	Not employed	
## COPD, asthma.	Not employed	
## Diabetes mellitus.	Not employed	
## Disorders of mouth and esophagus.	Not employed	
## Disorders of teeth and jaws.	Not employed	
## Disorders of the upper GI.	Not employed	
## Epilepsy and convulsions.	Not employed	
## Female genital disorders, and contraception.	Not employed	
## Gallbladder, pancreatic, and liver disease.	Not employed	
## Glaucoma.	Not employed	
## Headache.	Not employed	
## Heart disease.	Not employed	
## Hemorrhagic, coagulation, and disorders of White Blood cells.	Not employed	Hemorrhagic, coagulation, and disorders of White Blood cells
## Hereditary, degenerative and other nervous system disorders.	Not employed	Hereditary, degenerative and other nervous system disorders
## Hernias.	Not employed	
## Hyperlipidemia.	Not employed	

## Hypertension.Not employed	
## Infectious diseases.Not employed	
## Influenza.Not employed	
## Intestinal infection.Not employed	
## Kidney Disease.Not employed	
## Male genital disorders.Not employed	
## Mental disorders.Not employed	
## Non-malignant breast disease.Not employed	
## Non-malignant neoplasm.Not employed	
## Normal birth/live born.Not employed	
## Osteoarthritis and other non-traumatic joint disorders.Not employed	Osteoarthritis
## Other bone and musculoskeletal disease.Not employed	
## Other care and screening.Not employed	
## Other circulatory conditions arteries, veins, and lymphatics.Not employed	Other circulatory
## Other CNS disorders.Not employed	
## Other endocrine, nutritional & immune disorder.Not employed	Other
## Other eye disorders.Not employed	
## Other GI.Not employed	
## Other stomach and intestinal disorders.Not employed	
## Other urinary.Not employed	
## Otitis media.Not employed	
## Paralysis.Not employed	
## Perinatal Conditions.Not employed	
## Pneumonia.Not employed	
## Poisoning by medical and non-medical substances.Not employed	Poisoning
## Residual Codes.Not employed	
## Skin disorders.Not employed	
## Symptoms.Not employed	
## Systemic lupus and connective tissues disorders.Not employed	Systemic
## Thyroid disease.Not employed	
## Tonsillitis.Not employed	
## Trauma-related disorders.Not employed	
## Urinary tract infections.Not employed	
## Acute Bronchitis and URI.Inapplicable (age < 16)	
## Allergic reactions.Inapplicable (age < 16)	
## Anemia and other deficiencies.Inapplicable (age < 16)	
## Appendicitis.Inapplicable (age < 16)	
## Back problems.Inapplicable (age < 16)	
## Cancer.Inapplicable (age < 16)	
## Complications of surgery or device.Inapplicable (age < 16)	
## Congenital anomalies.Inapplicable (age < 16)	
## COPD, asthma.Inapplicable (age < 16)	
## Diabetes mellitus.Inapplicable (age < 16)	
## Disorders of mouth and esophagus.Inapplicable (age < 16)	
## Disorders of teeth and jaws.Inapplicable (age < 16)	
## Disorders of the upper GI.Inapplicable (age < 16)	
## Epilepsy and convulsions.Inapplicable (age < 16)	
## Female genital disorders, and contraception.Inapplicable (age < 16)	
## Gallbladder, pancreatic, and liver disease.Inapplicable (age < 16)	
## Headache.Inapplicable (age < 16)	
## Heart disease.Inapplicable (age < 16)	
## Hemorrhagic, coagulation, and disorders of White Blood cells.Inapplicable (age < 16)	Hemorrhagic, coagulation, and disorders of White Blood cells
## Hereditary, degenerative and other nervous system disorders.Inapplicable (age < 16)	Hereditary, degenerative and other nervous system disorders
## Hernias.Inapplicable (age < 16)	

```

## Hyperlipidemia.Inapplicable (age < 16)
## Hypertension.Inapplicable (age < 16)
## Infectious diseases.Inapplicable (age < 16)
## Influenza.Inapplicable (age < 16)
## Intestinal infection.Inapplicable (age < 16)
## Kidney Disease.Inapplicable (age < 16)
## Male genital disorders.Inapplicable (age < 16)
## Mental disorders.Inapplicable (age < 16)
## Non-malignant breast disease.Inapplicable (age < 16)
## Non-malignant neoplasm.Inapplicable (age < 16)
## Normal birth/live born.Inapplicable (age < 16)
## Osteoarthritis and other non-traumatic joint disorders.Inapplicable (age < 16) Osteoarthritis
## Other bone and musculoskeletal disease.Inapplicable (age < 16)
## Other care and screening.Inapplicable (age < 16)
## Other circulatory conditions arteries, veins, and lymphatics.Inapplicable (age < 16) Other circulatory
## Other CNS disorders.Inapplicable (age < 16)
## Other endocrine, nutritional & immune disorder.Inapplicable (age < 16) Other
## Other eye disorders.Inapplicable (age < 16)
## Other GI.Inapplicable (age < 16)
## Other stomach and intestinal disorders.Inapplicable (age < 16)
## Other urinary.Inapplicable (age < 16)
## Otitis media.Inapplicable (age < 16)
## Paralysis.Inapplicable (age < 16)
## Perinatal Conditions.Inapplicable (age < 16)
## Pneumonia.Inapplicable (age < 16)
## Poisoning by medical and non-medical substances.Inapplicable (age < 16) Poisoning
## Residual Codes.Inapplicable (age < 16)
## Skin disorders.Inapplicable (age < 16)
## Symptoms.Inapplicable (age < 16)
## Systemic lupus and connective tissues disorders.Inapplicable (age < 16) Systemic
## Thyroid disease.Inapplicable (age < 16)
## Tonsillitis.Inapplicable (age < 16)
## Trauma-related disorders.Inapplicable (age < 16)
## Urinary tract infections.Inapplicable (age < 16)
## Back problems.Missing
## Cancer.Missing
## Skin disorders.Missing
##
## Acute Bronchitis and URI.Employed
## Allergic reactions.Employed
## Anemia and other deficiencies.Employed
## Appendicitis.Employed
## Back problems.Employed
## Cancer.Employed
## Cataract.Employed
## Cerebrovascular disease.Employed
## Complications of pregnancy and birth.Employed
## Complications of surgery or device.Employed
## Congenital anomalies.Employed
## COPD, asthma.Employed
## Diabetes mellitus.Employed
## Disorders of mouth and esophagus.Employed
## Disorders of teeth and jaws.Employed
## Disorders of the upper GI.Employed

```


Epilepsy and convulsions.Employed
 ## Female genital disorders, and contraception.Employed
 ## Gallbladder, pancreatic, and liver disease.Employed
 ## Glaucoma.Employed
 ## Headache.Employed
 ## Heart disease.Employed
 ## Hemorrhagic, coagulation, and disorders of White Blood cells.Employed
 ## Hereditary, degenerative and other nervous system disorders.Employed
 ## Hernias.Employed
 ## Hyperlipidemia.Employed
 ## Hypertension.Employed
 ## Infectious diseases.Employed
 ## Influenza.Employed
 ## Intestinal infection.Employed
 ## Kidney Disease.Employed
 ## Male genital disorders.Employed
 ## Mental disorders.Employed
 ## Non-malignant breast disease.Employed
 ## Non-malignant neoplasm.Employed
 ## Normal birth/live born.Employed
 ## Osteoarthritis and other non-traumatic joint disorders.Employed
 ## Other bone and musculoskeletal disease.Employed
 ## Other care and screening.Employed
 ## Other circulatory conditions arteries, veins, and lymphatics.Employed
 ## Other CNS disorders.Employed
 ## Other endocrine, nutritional & immune disorder.Employed
 ## Other eye disorders.Employed
 ## Other GI.Employed
 ## Other stomach and intestinal disorders.Employed
 ## Other urinary.Employed
 ## Otitis media.Employed
 ## Paralysis.Employed
 ## Perinatal Conditions.Employed
 ## Pneumonia.Employed
 ## Poisoning by medical and non-medical substances.Employed
 ## Residual Codes.Employed
 ## Skin disorders.Employed
 ## Symptoms.Employed
 ## Systemic lupus and connective tissues disorders.Employed
 ## Thyroid disease.Employed
 ## Tonsillitis.Employed
 ## Trauma-related disorders.Employed
 ## Urinary tract infections.Employed
 ## Acute Bronchitis and URI.Not employed
 ## Allergic reactions.Not employed
 ## Anemia and other deficiencies.Not employed
 ## Appendicitis.Not employed
 ## Back problems.Not employed
 ## Cancer.Not employed
 ## Cataract.Not employed
 ## Cerebrovascular disease.Not employed
 ## Complications of pregnancy and birth.Not employed
 ## Complications of surgery or device.Not employed
 ## Congenital anomalies.Not employed

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## COPD, asthma.	Not employed	Not e
## Diabetes mellitus.	Not employed	Not e
## Disorders of mouth and esophagus.	Not employed	Not e
## Disorders of teeth and jaws.	Not employed	Not e
## Disorders of the upper GI.	Not employed	Not e
## Epilepsy and convulsions.	Not employed	Not e
## Female genital disorders, and contraception.	Not employed	Not e
## Gallbladder, pancreatic, and liver disease.	Not employed	Not e
## Glaucoma.	Not employed	Not e
## Headache.	Not employed	Not e
## Heart disease.	Not employed	Not e
## Hemorrhagic, coagulation, and disorders of White Blood cells.	Not employed	Not e
## Hereditary, degenerative and other nervous system disorders.	Not employed	Not e
## Hernias.	Not employed	Not e
## Hyperlipidemia.	Not employed	Not e
## Hypertension.	Not employed	Not e
## Infectious diseases.	Not employed	Not e
## Influenza.	Not employed	Not e
## Intestinal infection.	Not employed	Not e
## Kidney Disease.	Not employed	Not e
## Male genital disorders.	Not employed	Not e
## Mental disorders.	Not employed	Not e
## Non-malignant breast disease.	Not employed	Not e
## Non-malignant neoplasm.	Not employed	Not e
## Normal birth/live born.	Not employed	Not e
## Osteoarthritis and other non-traumatic joint disorders.	Not employed	Not e
## Other bone and musculoskeletal disease.	Not employed	Not e
## Other care and screening.	Not employed	Not e
## Other circulatory conditions arteries, veins, and lymphatics.	Not employed	Not e
## Other CNS disorders.	Not employed	Not e
## Other endocrine, nutritional & immune disorder.	Not employed	Not e
## Other eye disorders.	Not employed	Not e
## Other GI.	Not employed	Not e
## Other stomach and intestinal disorders.	Not employed	Not e
## Other urinary.	Not employed	Not e
## Otitis media.	Not employed	Not e
## Paralysis.	Not employed	Not e
## Perinatal Conditions.	Not employed	Not e
## Pneumonia.	Not employed	Not e
## Poisoning by medical and non-medical substances.	Not employed	Not e
## Residual Codes.	Not employed	Not e
## Skin disorders.	Not employed	Not e
## Symptoms.	Not employed	Not e
## Systemic lupus and connective tissues disorders.	Not employed	Not e
## Thyroid disease.	Not employed	Not e
## Tonsillitis.	Not employed	Not e
## Trauma-related disorders.	Not employed	Not e
## Urinary tract infections.	Not employed	Not e
## Acute Bronchitis and URI.	Inapplicable (age < 16)	Inapplicable (a
## Allergic reactions.	Inapplicable (age < 16)	Inapplicable (a
## Anemia and other deficiencies.	Inapplicable (age < 16)	Inapplicable (a
## Appendicitis.	Inapplicable (age < 16)	Inapplicable (a
## Back problems.	Inapplicable (age < 16)	Inapplicable (a
## Cancer.	Inapplicable (age < 16)	Inapplicable (a

## Complications of surgery or device.	Inapplicable (age < 16)	Inapplicable (a
## Congenital anomalies.	Inapplicable (age < 16)	Inapplicable (a
## COPD, asthma.	Inapplicable (age < 16)	Inapplicable (a
## Diabetes mellitus.	Inapplicable (age < 16)	Inapplicable (a
## Disorders of mouth and esophagus.	Inapplicable (age < 16)	Inapplicable (a
## Disorders of teeth and jaws.	Inapplicable (age < 16)	Inapplicable (a
## Disorders of the upper GI.	Inapplicable (age < 16)	Inapplicable (a
## Epilepsy and convulsions.	Inapplicable (age < 16)	Inapplicable (a
## Female genital disorders, and contraception.	Inapplicable (age < 16)	Inapplicable (a
## Gallbladder, pancreatic, and liver disease.	Inapplicable (age < 16)	Inapplicable (a
## Headache.	Inapplicable (age < 16)	Inapplicable (a
## Heart disease.	Inapplicable (age < 16)	Inapplicable (a
## Hemorrhagic, coagulation, and disorders of White Blood cells.	Inapplicable (age < 16)	Inapplicable (a
## Hereditary, degenerative and other nervous system disorders.	Inapplicable (age < 16)	Inapplicable (a
## Hernias.	Inapplicable (age < 16)	Inapplicable (a
## Hyperlipidemia.	Inapplicable (age < 16)	Inapplicable (a
## Hypertension.	Inapplicable (age < 16)	Inapplicable (a
## Infectious diseases.	Inapplicable (age < 16)	Inapplicable (a
## Influenza.	Inapplicable (age < 16)	Inapplicable (a
## Intestinal infection.	Inapplicable (age < 16)	Inapplicable (a
## Kidney Disease.	Inapplicable (age < 16)	Inapplicable (a
## Male genital disorders.	Inapplicable (age < 16)	Inapplicable (a
## Mental disorders.	Inapplicable (age < 16)	Inapplicable (a
## Non-malignant breast disease.	Inapplicable (age < 16)	Inapplicable (a
## Non-malignant neoplasm.	Inapplicable (age < 16)	Inapplicable (a
## Normal birth/live born.	Inapplicable (age < 16)	Inapplicable (a
## Osteoarthritis and other non-traumatic joint disorders.	Inapplicable (age < 16)	Inapplicable (a
## Other bone and musculoskeletal disease.	Inapplicable (age < 16)	Inapplicable (a
## Other care and screening.	Inapplicable (age < 16)	Inapplicable (a
## Other circulatory conditions arteries, veins, and lymphatics.	Inapplicable (age < 16)	Inapplicable (a
## Other CNS disorders.	Inapplicable (age < 16)	Inapplicable (a
## Other endocrine, nutritional & immune disorder.	Inapplicable (age < 16)	Inapplicable (a
## Other eye disorders.	Inapplicable (age < 16)	Inapplicable (a
## Other GI.	Inapplicable (age < 16)	Inapplicable (a
## Other stomach and intestinal disorders.	Inapplicable (age < 16)	Inapplicable (a
## Other urinary.	Inapplicable (age < 16)	Inapplicable (a
## Otitis media.	Inapplicable (age < 16)	Inapplicable (a
## Paralysis.	Inapplicable (age < 16)	Inapplicable (a
## Perinatal Conditions.	Inapplicable (age < 16)	Inapplicable (a
## Pneumonia.	Inapplicable (age < 16)	Inapplicable (a
## Poisoning by medical and non-medical substances.	Inapplicable (age < 16)	Inapplicable (a
## Residual Codes.	Inapplicable (age < 16)	Inapplicable (a
## Skin disorders.	Inapplicable (age < 16)	Inapplicable (a
## Symptoms.	Inapplicable (age < 16)	Inapplicable (a
## Systemic lupus and connective tissues disorders.	Inapplicable (age < 16)	Inapplicable (a
## Thyroid disease.	Inapplicable (age < 16)	Inapplicable (a
## Tonsillitis.	Inapplicable (age < 16)	Inapplicable (a
## Trauma-related disorders.	Inapplicable (age < 16)	Inapplicable (a
## Urinary tract infections.	Inapplicable (age < 16)	Inapplicable (a
## Back problems.	Missing	
## Cancer.	Missing	
## Skin disorders.	Missing	
##		
## Acute Bronchitis and URI.	Employed	

XP15X
496.7787

## Allergic reactions.Employed	657.0549
## Anemia and other deficiencies.Employed	819.0162
## Appendicitis.Employed	19154.2385
## Back problems.Employed	2194.8054
## Cancer.Employed	3549.2187
## Cataract.Employed	1471.2429
## Cerebrovascular disease.Employed	14411.3382
## Complications of pregnancy and birth.Employed	2928.1148
## Complications of surgery or device.Employed	5681.6283
## Congenital anomalies.Employed	7462.1264
## COPD, asthma.Employed	1212.9457
## Diabetes mellitus.Employed	2699.6961
## Disorders of mouth and esophagus.Employed	381.0485
## Disorders of teeth and jaws.Employed	232.0421
## Disorders of the upper GI.Employed	885.8209
## Epilepsy and convulsions.Employed	2731.4572
## Female genital disorders, and contraception.Employed	1114.5993
## Gallbladder, pancreatic, and liver disease.Employed	5309.7084
## Glaucoma.Employed	709.7756
## Headache.Employed	1305.6699
## Heart disease.Employed	3966.3818
## Hemorrhagic, coagulation, and disorders of White Blood cells.Employed	1856.1316
## Hereditary, degenerative and other nervous system disorders.Employed	7574.5077
## Hernias.Employed	3751.9902
## Hyperlipidemia.Employed	591.3942
## Hypertension.Employed	566.0917
## Infectious diseases.Employed	2453.7910
## Influenza.Employed	397.6891
## Intestinal infection.Employed	1155.0810
## Kidney Disease.Employed	4497.3086
## Male genital disorders.Employed	1687.4360
## Mental disorders.Employed	1275.7888
## Non-malignant breast disease.Employed	1414.9282
## Non-malignant neoplasm.Employed	2236.0072
## Normal birth/live born.Employed	7653.6256
## Osteoarthritis and other non-traumatic joint disorders.Employed	1653.9216
## Other bone and musculoskeletal disease.Employed	1520.9833
## Other care and screening.Employed	573.8013
## Other circulatory conditions arteries, veins, and lymphatics.Employed	1908.6809
## Other CNS disorders.Employed	1704.8192
## Other endocrine, nutritional & immune disorder.Employed	1077.3901
## Other eye disorders.Employed	759.1449
## Other GI.Employed	3307.0661
## Other stomach and intestinal disorders.Employed	7826.4513
## Other urinary.Employed	1695.3564
## Otitis media.Employed	331.8157
## Paralysis.Employed	4228.4907
## Perinatal Conditions.Employed	165.6000
## Pneumonia.Employed	8871.7513
## Poisoning by medical and non-medical substances.Employed	1974.1216
## Residual Codes.Employed	1022.6697
## Skin disorders.Employed	1102.3434
## Symptoms.Employed	3069.8140
## Systemic lupus and connective tissues disorders.Employed	1423.9378

## Thyroid disease.Employed	471.4307
## Tonsillitis.Employed	2416.5267
## Trauma-related disorders.Employed	2303.4229
## Urinary tract infections.Employed	630.2361
## Acute Bronchitis and URI.Not employed	413.5475
## Allergic reactions.Not employed	751.5097
## Anemia and other deficiencies.Not employed	1388.0762
## Appendicitis.Not employed	17225.7294
## Back problems.Not employed	2365.5832
## Cancer.Not employed	5389.1078
## Cataract.Not employed	1688.6376
## Cerebrovascular disease.Not employed	7148.9519
## Complications of pregnancy and birth.Not employed	2688.0712
## Complications of surgery or device.Not employed	4162.4816
## Congenital anomalies.Not employed	2692.8301
## COPD, asthma.Not employed	2537.7227
## Diabetes mellitus.Not employed	3836.4749
## Disorders of mouth and esophagus.Not employed	522.2062
## Disorders of teeth and jaws.Not employed	214.6769
## Disorders of the upper GI.Not employed	1092.4163
## Epilepsy and convulsions.Not employed	2881.5507
## Female genital disorders, and contraception.Not employed	1174.0701
## Gallbladder, pancreatic, and liver disease.Not employed	6367.6880
## Glaucoma.Not employed	1087.1078
## Headache.Not employed	966.8871
## Heart disease.Not employed	4646.5878
## Hemorrhagic, coagulation, and disorders of White Blood cells.Not employed	4814.1473
## Hereditary, degenerative and other nervous system disorders.Not employed	7076.1937
## Hernias.Not employed	2889.7973
## Hyperlipidemia.Not employed	827.5501
## Hypertension.Not employed	1003.3220
## Infectious diseases.Not employed	4968.0783
## Influenza.Not employed	609.7485
## Intestinal infection.Not employed	6166.4356
## Kidney Disease.Not employed	8101.0315
## Male genital disorders.Not employed	847.9703
## Mental disorders.Not employed	2320.2322
## Non-malignant breast disease.Not employed	526.0195
## Non-malignant neoplasm.Not employed	1299.4752
## Normal birth/live born.Not employed	7432.8473
## Osteoarthritis and other non-traumatic joint disorders.Not employed	2231.2956
## Other bone and musculoskeletal disease.Not employed	1117.9109
## Other care and screening.Not employed	1368.0660
## Other circulatory conditions arteries, veins, and lymphatics.Not employed	3823.5720
## Other CNS disorders.Not employed	2198.1880
## Other endocrine, nutritional & immune disorder.Not employed	1447.7688
## Other eye disorders.Not employed	1210.9807
## Other GI.Not employed	1992.8909
## Other stomach and intestinal disorders.Not employed	7999.2709
## Other urinary.Not employed	1353.9356
## Otitis media.Not employed	431.7659
## Paralysis.Not employed	41510.0496
## Perinatal Conditions.Not employed	4.2200
## Pneumonia.Not employed	8424.6969

## Poisoning by medical and non-medical substances.Not employed	2209.9133
## Residual Codes.Not employed	1511.7699
## Skin disorders.Not employed	1641.6206
## Symptoms.Not employed	1498.4670
## Systemic lupus and connective tissues disorders.Not employed	3259.2307
## Thyroid disease.Not employed	502.2475
## Tonsillitis.Not employed	2274.2101
## Trauma-related disorders.Not employed	3810.7273
## Urinary tract infections.Not employed	1299.5876
## Acute Bronchitis and URI.Inapplicable (age < 16)	252.7572
## Allergic reactions.Inapplicable (age < 16)	395.0554
## Anemia and other deficiencies.Inapplicable (age < 16)	261.7469
## Appendicitis.Inapplicable (age < 16)	9698.1851
## Back problems.Inapplicable (age < 16)	1307.0951
## Cancer.Inapplicable (age < 16)	16120.9952
## Complications of surgery or device.Inapplicable (age < 16)	1003.1680
## Congenital anomalies.Inapplicable (age < 16)	9775.8409
## COPD, asthma.Inapplicable (age < 16)	613.6622
## Diabetes mellitus.Inapplicable (age < 16)	5297.2076
## Disorders of mouth and esophagus.Inapplicable (age < 16)	360.0128
## Disorders of teeth and jaws.Inapplicable (age < 16)	640.0787
## Disorders of the upper GI.Inapplicable (age < 16)	656.0092
## Epilepsy and convulsions.Inapplicable (age < 16)	4139.8597
## Female genital disorders, and contraception.Inapplicable (age < 16)	1429.7958
## Gallbladder, pancreatic, and liver disease.Inapplicable (age < 16)	1054.7146
## Headache.Inapplicable (age < 16)	536.6824
## Heart disease.Inapplicable (age < 16)	9840.5596
## Hemorrhagic, coagulation, and disorders of White Blood cells.Inapplicable (age < 16)	3828.0822
## Hereditary, degenerative and other nervous system disorders.Inapplicable (age < 16)	504.3942
## Hernias.Inapplicable (age < 16)	1453.1178
## Hyperlipidemia.Inapplicable (age < 16)	129.8503
## Hypertension.Inapplicable (age < 16)	1262.5006
## Infectious diseases.Inapplicable (age < 16)	585.3970
## Influenza.Inapplicable (age < 16)	419.5122
## Intestinal infection.Inapplicable (age < 16)	261.2535
## Kidney Disease.Inapplicable (age < 16)	2670.9957
## Male genital disorders.Inapplicable (age < 16)	331.9187
## Mental disorders.Inapplicable (age < 16)	3422.5494
## Non-malignant breast disease.Inapplicable (age < 16)	823.6777
## Non-malignant neoplasm.Inapplicable (age < 16)	546.0086
## Normal birth/live born.Inapplicable (age < 16)	1862.6854
## Osteoarthritis and other non-traumatic joint disorders.Inapplicable (age < 16)	1800.8052
## Other bone and musculoskeletal disease.Inapplicable (age < 16)	2172.8239
## Other care and screening.Inapplicable (age < 16)	790.8571
## Other circulatory conditions arteries, veins, and lymphatics.Inapplicable (age < 16)	1179.5730
## Other CNS disorders.Inapplicable (age < 16)	1483.9504
## Other endocrine, nutritional & immune disorder.Inapplicable (age < 16)	3066.5659
## Other eye disorders.Inapplicable (age < 16)	425.7561
## Other GI.Inapplicable (age < 16)	1445.8381
## Other stomach and intestinal disorders.Inapplicable (age < 16)	13150.4322
## Other urinary.Inapplicable (age < 16)	1010.0399
## Otitis media.Inapplicable (age < 16)	361.3605
## Paralysis.Inapplicable (age < 16)	16753.9597
## Perinatal Conditions.Inapplicable (age < 16)	3990.9994

## Pneumonia.Inapplicable (age < 16)	743.6467
## Poisoning by medical and non-medical substances.Inapplicable (age < 16)	398.1459
## Residual Codes.Inapplicable (age < 16)	1424.5593
## Skin disorders.Inapplicable (age < 16)	516.0623
## Symptoms.Inapplicable (age < 16)	428.1254
## Systemic lupus and connective tissues disorders.Inapplicable (age < 16)	1313.1888
## Thyroid disease.Inapplicable (age < 16)	728.6741
## Tonsillitis.Inapplicable (age < 16)	1048.0131
## Trauma-related disorders.Inapplicable (age < 16)	944.8565
## Urinary tract infections.Inapplicable (age < 16)	631.7929
## Back problems.Missing	1914.5700
## Cancer.Missing	51180.4300
## Skin disorders.Missing	64.6800
##	se
## Acute Bronchitis and URI.Employed	149.55444
## Allergic reactions.Employed	167.40249
## Anemia and other deficiencies.Employed	259.20615
## Appendicitis.Employed	4882.10726
## Back problems.Employed	455.23092
## Cancer.Employed	601.61441
## Cataract.Employed	284.85231
## Cerebrovascular disease.Employed	6247.23837
## Complications of pregnancy and birth.Employed	714.54124
## Complications of surgery or device.Employed	4944.25797
## Congenital anomalies.Employed	3364.80936
## COPD, asthma.Employed	186.36871
## Diabetes mellitus.Employed	201.10473
## Disorders of mouth and esophagus.Employed	143.64409
## Disorders of teeth and jaws.Employed	86.06673
## Disorders of the upper GI.Employed	91.85383
## Epilepsy and convulsions.Employed	620.27004
## Female genital disorders, and contraception.Employed	126.83723
## Gallbladder, pancreatic, and liver disease.Employed	714.09145
## Glaucoma.Employed	101.93875
## Headache.Employed	269.76748
## Heart disease.Employed	537.46375
## Hemorrhagic, coagulation, and disorders of White Blood cells.Employed	762.96014
## Hereditary, degenerative and other nervous system disorders.Employed	2934.33374
## Hernias.Employed	738.07415
## Hyperlipidemia.Employed	34.10532
## Hypertension.Employed	35.69530
## Infectious diseases.Employed	923.57402
## Influenza.Employed	107.24468
## Intestinal infection.Employed	483.00275
## Kidney Disease.Employed	603.68113
## Male genital disorders.Employed	268.28532
## Mental disorders.Employed	88.46883
## Non-malignant breast disease.Employed	329.97445
## Non-malignant neoplasm.Employed	719.76488
## Normal birth/live born.Employed	851.69799
## Osteoarthritis and other non-traumatic joint disorders.Employed	176.59068
## Other bone and musculoskeletal disease.Employed	430.27766
## Other care and screening.Employed	52.45099
## Other circulatory conditions arteries, veins, and lymphatics.Employed	353.48492

## Other CNS disorders.Employed	309.03785
## Other endocrine, nutritional & immune disorder.Employed	151.80527
## Other eye disorders.Employed	92.55612
## Other GI.Employed	2179.97127
## Other stomach and intestinal disorders.Employed	1630.16625
## Other urinary.Employed	386.62113
## Otitis media.Employed	63.38952
## Paralysis.Employed	1003.55883
## Perinatal Conditions.Employed	0.00000
## Pneumonia.Employed	5529.61654
## Poisoning by medical and non-medical substances.Employed	697.61340
## Residual Codes.Employed	141.81116
## Skin disorders.Employed	137.57685
## Symptoms.Employed	1844.82641
## Systemic lupus and connective tissues disorders.Employed	167.02899
## Thyroid disease.Employed	74.55646
## Tonsillitis.Employed	1095.75654
## Trauma-related disorders.Employed	188.89681
## Urinary tract infections.Employed	111.71961
## Acute Bronchitis and URI.Not employed	61.29302
## Allergic reactions.Not employed	162.74369
## Anemia and other deficiencies.Not employed	332.17294
## Appendicitis.Not employed	4329.83222
## Back problems.Not employed	237.42745
## Cancer.Not employed	690.59156
## Cataract.Not employed	190.13497
## Cerebrovascular disease.Not employed	1254.13866
## Complications of pregnancy and birth.Not employed	1526.67969
## Complications of surgery or device.Not employed	1294.08378
## Congenital anomalies.Not employed	810.92442
## COPD, asthma.Not employed	195.13998
## Diabetes mellitus.Not employed	230.79416
## Disorders of mouth and esophagus.Not employed	177.80037
## Disorders of teeth and jaws.Not employed	37.57652
## Disorders of the upper GI.Not employed	151.54561
## Epilepsy and convulsions.Not employed	624.59573
## Female genital disorders, and contraception.Not employed	275.09542
## Gallbladder, pancreatic, and liver disease.Not employed	1342.94265
## Glaucoma.Not employed	105.53676
## Headache.Not employed	122.61856
## Heart disease.Not employed	454.42428
## Hemorrhagic, coagulation, and disorders of White Blood cells.Not employed	2401.74487
## Hereditary, degenerative and other nervous system disorders.Not employed	3086.74826
## Hernias.Not employed	792.17798
## Hyperlipidemia.Not employed	53.56784
## Hypertension.Not employed	87.10061
## Infectious diseases.Not employed	1351.72379
## Influenza.Not employed	112.08836
## Intestinal infection.Not employed	2313.80793
## Kidney Disease.Not employed	1842.34381
## Male genital disorders.Not employed	142.30664
## Mental disorders.Not employed	148.32975
## Non-malignant breast disease.Not employed	102.35237
## Non-malignant neoplasm.Not employed	394.12459

## Normal birth/live born.Not employed	865.74197
## Osteoarthritis and other non-traumatic joint disorders.Not employed	182.00076
## Other bone and musculoskeletal disease.Not employed	161.56042
## Other care and screening.Not employed	200.49294
## Other circulatory conditions arteries, veins, and lymphatics.Not employed	562.31374
## Other CNS disorders.Not employed	285.56233
## Other endocrine, nutritional & immune disorder.Not employed	296.20015
## Other eye disorders.Not employed	98.84180
## Other GI.Not employed	313.83735
## Other stomach and intestinal disorders.Not employed	2826.14981
## Other urinary.Not employed	185.71408
## Otitis media.Not employed	119.85400
## Paralysis.Not employed	22524.62113
## Perinatal Conditions.Not employed	0.00000
## Pneumonia.Not employed	1113.66892
## Poisoning by medical and non-medical substances.Not employed	1069.90750
## Residual Codes.Not employed	205.33898
## Skin disorders.Not employed	206.63702
## Symptoms.Not employed	194.79876
## Systemic lupus and connective tissues disorders.Not employed	339.43898
## Thyroid disease.Not employed	78.13368
## Tonsillitis.Not employed	1176.49890
## Trauma-related disorders.Not employed	335.74678
## Urinary tract infections.Not employed	190.04014
## Acute Bronchitis and URI.Inapplicable (age < 16)	15.82350
## Allergic reactions.Inapplicable (age < 16)	62.10408
## Anemia and other deficiencies.Inapplicable (age < 16)	115.80821
## Appendicitis.Inapplicable (age < 16)	1612.71193
## Back problems.Inapplicable (age < 16)	416.70949
## Cancer.Inapplicable (age < 16)	13473.98042
## Complications of surgery or device.Inapplicable (age < 16)	679.87001
## Congenital anomalies.Inapplicable (age < 16)	6508.52721
## COPD, asthma.Inapplicable (age < 16)	63.42572
## Diabetes mellitus.Inapplicable (age < 16)	2448.42427
## Disorders of mouth and esophagus.Inapplicable (age < 16)	131.91018
## Disorders of teeth and jaws.Inapplicable (age < 16)	360.00175
## Disorders of the upper GI.Inapplicable (age < 16)	238.05999
## Epilepsy and convulsions.Inapplicable (age < 16)	1906.72455
## Female genital disorders, and contraception.Inapplicable (age < 16)	1202.48402
## Gallbladder, pancreatic, and liver disease.Inapplicable (age < 16)	580.77186
## Headache.Inapplicable (age < 16)	187.98727
## Heart disease.Inapplicable (age < 16)	6681.22136
## Hemorrhagic, coagulation, and disorders of White Blood cells.Inapplicable (age < 16)	1941.31060
## Hereditary, degenerative and other nervous system disorders.Inapplicable (age < 16)	279.63192
## Hernias.Inapplicable (age < 16)	714.43232
## Hyperlipidemia.Inapplicable (age < 16)	13.19383
## Hypertension.Inapplicable (age < 16)	575.66210
## Infectious diseases.Inapplicable (age < 16)	172.82089
## Influenza.Inapplicable (age < 16)	175.28358
## Intestinal infection.Inapplicable (age < 16)	36.95950
## Kidney Disease.Inapplicable (age < 16)	1103.58771
## Male genital disorders.Inapplicable (age < 16)	117.68786
## Mental disorders.Inapplicable (age < 16)	398.77075
## Non-malignant breast disease.Inapplicable (age < 16)	204.02600

## Non-malignant neoplasm.Inapplicable (age < 16)	152.31138
## Normal birth/live born.Inapplicable (age < 16)	749.51191
## Osteoarthritis and other non-traumatic joint disorders.Inapplicable (age < 16)	684.33343
## Other bone and musculoskeletal disease.Inapplicable (age < 16)	1107.78202
## Other care and screening.Inapplicable (age < 16)	166.38888
## Other circulatory conditions arteries, veins, and lymphatics.Inapplicable (age < 16)	798.66736
## Other CNS disorders.Inapplicable (age < 16)	396.95352
## Other endocrine, nutritional & immune disorder.Inapplicable (age < 16)	1139.35886
## Other eye disorders.Inapplicable (age < 16)	118.76880
## Other GI.Inapplicable (age < 16)	918.90745
## Other stomach and intestinal disorders.Inapplicable (age < 16)	2959.43633
## Other urinary.Inapplicable (age < 16)	354.34678
## Otitis media.Inapplicable (age < 16)	37.56148
## Paralysis.Inapplicable (age < 16)	6270.64341
## Perinatal Conditions.Inapplicable (age < 16)	1370.66398
## Pneumonia.Inapplicable (age < 16)	161.85352
## Poisoning by medical and non-medical substances.Inapplicable (age < 16)	104.55560
## Residual Codes.Inapplicable (age < 16)	663.67866
## Skin disorders.Inapplicable (age < 16)	137.79314
## Symptoms.Inapplicable (age < 16)	82.28922
## Systemic lupus and connective tissues disorders.Inapplicable (age < 16)	429.23188
## Thyroid disease.Inapplicable (age < 16)	320.34455
## Tonsillitis.Inapplicable (age < 16)	229.27941
## Trauma-related disorders.Inapplicable (age < 16)	113.88434
## Urinary tract infections.Inapplicable (age < 16)	355.64017
## Back problems.Missing	0.00000
## Cancer.Missing	0.00000
## Skin disorders.Missing	0.00000